
APPENDIX F

TIMELINE SUMMARY OF AVAILABLE MODEL APPLICATION DATA FOR THE HOUSATONIC RIVER ABOVE CANAAN, CT

Table F-1

Summary of Housatonic River Flow Data Above Canaan, CT

General Location	Sample Type	REF / SOURCE	Jan May Aug Dec	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Flow	Great Barrington, MA	Flow	USGS	Jan May Aug Dec																					
	Coltsville, MA	Flow		USGS																					

Note: Colored gages are within the study area

Explanation of Sample Types

Flow - Discharge measurement

St-30min - Stage taken at 30 minute increments

T-30min - Temperature taken at 30 minute increments

Comp. - Composite sample of biota

Indiv. - Individual sample of biota

F - Fillet sample of biota

WB - Whole Body sample of biota

TSS - Total Suspended Solids concentration

PSD - Particle Size Distribution of sediment sample

BD - Bulk Density (net weight) of sediment samples

CS - Core Sediment sample

SS - Surficial Sediment sample

GSvsC - Grain Size vs PCB Concentration

BOD₅ - Biological Oxygen Demand 5 day

WC - Water Column sample

Hazardous - Various Hazardous Constituents other than PCBs

DO - Dissolved Oxygen concentration

GrbS - Grab Sample

T&UNH₃ - Total and Unionized Ammonia concentrations

NO₃ - Nitrate concentration in water-column sample

Oil&Grease - Oil and Grease concentration

Tmp - Temperature measurement taken at daily increments

Nutr - Nutrients

General Location	Sample Type	REF / SOURCE	Jan May Aug Dec	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Snow Depth	HARTFORD	Daily	NCDC																						
	ALBANY	Daily	NCDC																						
	WORCESTER	Daily	NCDC																						
	WEST OTIS	Daily	NCDC																						
	BERLIN 5 S	Daily	NCDC																						
	PLAINFIELD 2	Daily	NCDC																						
	BECKET 2 SW	Daily	NCDC																						
	LANESBORO	Daily	NCDC																						
	STOCKBRIDGE	Daily	NCDC																						
	LENOX DALE	Daily	NCDC																						
	CHESTER2	Daily	NCDC																						
	CUMMINGTON HILL	Daily	NCDC																						
	GREAT BARRINGTON	Daily	NCDC																						
	DALTON	Daily	NCDC																						
	WORTHINGTON	Daily	NCDC																						
	COPAKE	Daily	NCDC																						

Note: Colored sites are within or close to the study area

Table F-2
Summary of Housatonic River Stage/Temp Data Above Canaan, CT

General Location	Sample Type	REF / SOURCE	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000				
			Jan	May	Aug	Dec	Jan	May	Aug	Dec	Jan	May	Aug	Dec	Jan	May	Aug	Dec	Jan	May	Aug	Dec	Jan	May	Aug	Dec		
Stage/ Temp	Woods Pond Dam	St-30min T-30min	GE/QEA GE/QEA		Jan	May	Aug	Dec	Jan	May	Aug	Dec																
	Woods Pond Headwaters	St-30min T-30min	GE/QEA GE/QEA		Jan	May	Aug	Dec	Jan	May	Aug	Dec																
	Rising Pond Dam	St-30min T-30min	GE/QEA GE/QEA		Jan	May	Aug	Dec	Jan	May	Aug	Dec																
	PSA Stations	SW/Events	Weston/USEPA		Jan	May	Aug	Dec	Jan	May	Aug	Dec																

Explanation of Sample Types

Flow - Discharge measurement

St-30min - Stage taken at 30 minute increments

T-30min - Temperature taken at 30 minute increments

Comp. - Composite sample of biota

Indiv. - Individual sample of biota

F - Fillet sample of biota

WB - Whole Body sample of biota

TSS - Total Suspended Solids concentration

PSD - Particle Size Distribution of sediment sample

BD - Bulk Density (net weight) of sediment samples

CS - Core Sediment sample

SS - Surficial Sediment sample

GSvsC - Grain Size vs PCB Concentration

BOD₅ - Biological Oxygen Demand 5 day

WC - Water Column sample

Hazardous - Various Hazardous Constituents other than PCBs

DO - Dissolved Oxygen concentration

GrbS - Grab Sample

T&UNH₃ - Total and Unionized Ammonia concentrations

NO₃ - Nitrate concentration in water-column sample

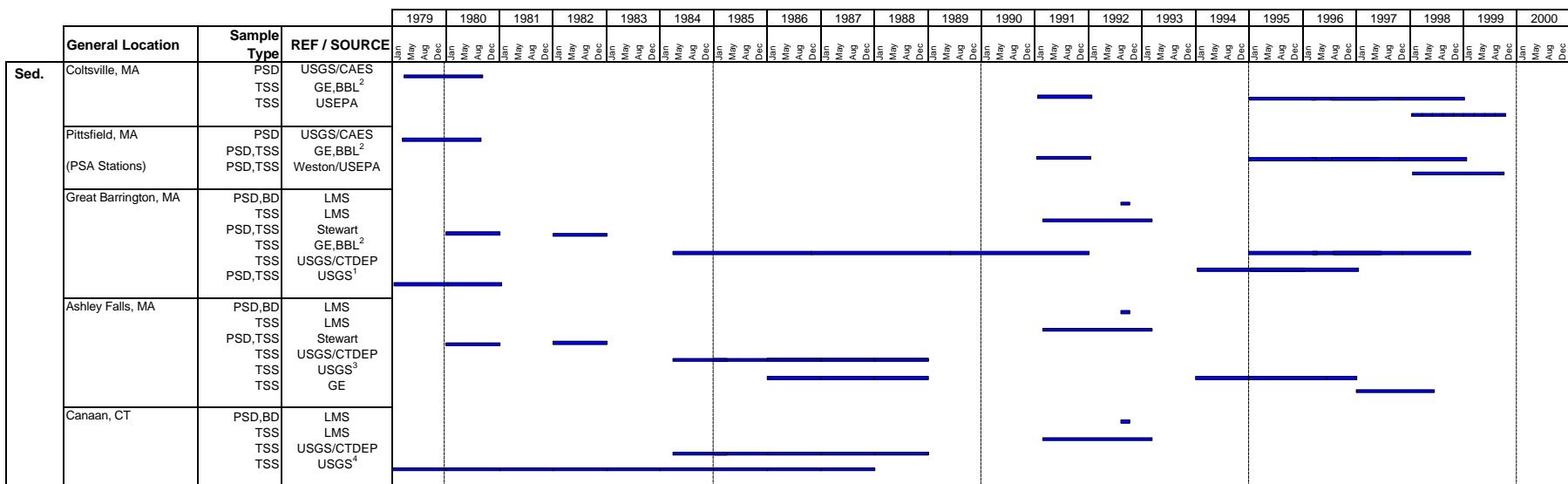
Oil&Grease - Oil and Grease concentration

Tmp - Temperature measurement taken at daily increments

Nutr - Nutrients

Table F-3

Summary of Housatonic River Sediment Data Above Canaan, CT



Explanation of Sample Types

Flow - Discharge measurement

St-30min - Stage taken at 30 minute increments

T-30min - Temperature taken at 30 minute increments

Comp. - Composite sample of biota

Indiv. - Individual sample of biota

F - Fillet sample of biota

WB - Whole Body sample of biota

TSS - Total Suspended Solids concentration

PSD - Particle Size Distribution of sediment sample

BD - Bulk Density (net weight) of sediment samples

CS - Core Sediment sample

SS - Surficial Sediment sample

GSvsC - Grain Size vs PCB Concentration

BOD₅ - Biological Oxygen Demand 5 day

WC - Water Column sample

Hazardous - Various Hazardous Constituents other than PCBs

DO - Dissolved Oxygen concentration

GrbS - Grab Sample

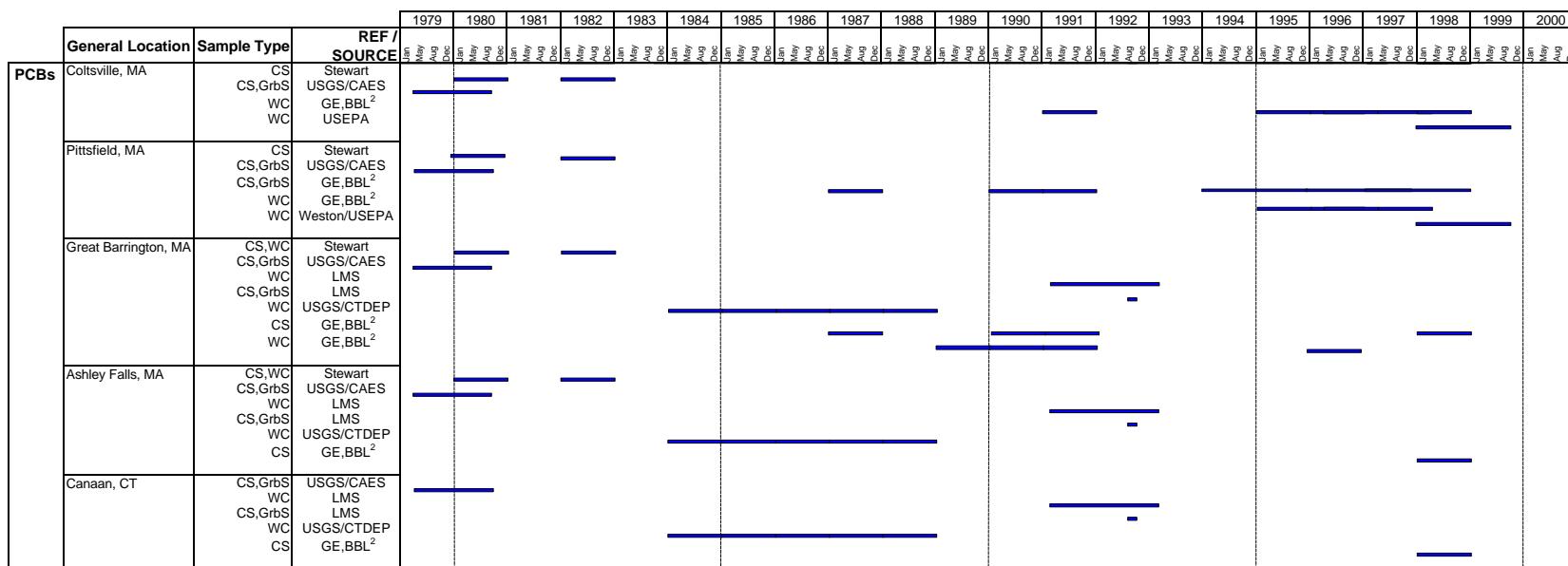
T&UNH₃ - Total and Unionized Ammonia concentrationsNO₃ - Nitrate concentration in water-column sample

Oil&Grease - Oil and Grease concentration

Tmp - Temperature measurement taken at daily increments

Nutr - Nutrients

Table F-4
Summary of Housatonic River PCB Data Above Canaan, CT



Explanation of Sample Types

Flow - Discharge measurement
 St-30min - Stage taken at 30 minute increments
 T-30min - Temperature taken at 30 minute increments
 Comp. - Composite sample of biota
 Indiv. - Individual sample of biota
 F - Fillet sample of biota

WB - Whole Body sample of biota
 TSS - Total Suspended Solids concentration
 PSD - Particle Size Distribution of sediment sample
 BD - Bulk Density (net weight) of sediment samples
 CS - Core Sediment sample
 SS - Surficial Sediment sample

GSvsC - Grain Size vs PCB Concentration
 BOD₅ - Biological Oxygen Demand 5 day
 WC - Water Column sample
 Hazardous - Various Hazardous Constituents other than PCBs
 DO - Dissolved Oxygen concentration
 GrbS - Grab Sample

T&UNH₃ - Total and Unionized Ammonia concentrations
 NO₃ - Nitrate concentration in water-column sample
 Oil&Grease - Oil and Grease concentration
 Tmp - Temperature measurement taken at daily increments
 Nutr - Nutrients

Table F-5

Summary of Housatonic River Biota Data Above Canaan, CT

Explanation of Sample Types

Flow - Discharge measurement

St-30min - Stage taken at 30 minute increments

T-30min - Temperature taken at 30 minute increments

Comp. - Composite sample of biota

Indiv. - Individual sample of fish

WB - Whole Body sample of biota

TSS - Total Suspended Solids concentration

PSD - Particle Size Distribution of sediment sample

BD - Bulk Density (net weight) of sediment samples

CS - Core Sediment sample

SS - Surficial Sediment sample

GSvsC - Grain Size vs PCB Concentration

BOD₅ - Biological Oxygen Demand 5 day

WC - Water Column sample

Hazardous - Various Hazardous Constituents other than PCB

DO - Dissolved Ox

T&UNH₃ - Total and Unionized Ammonia concentrations

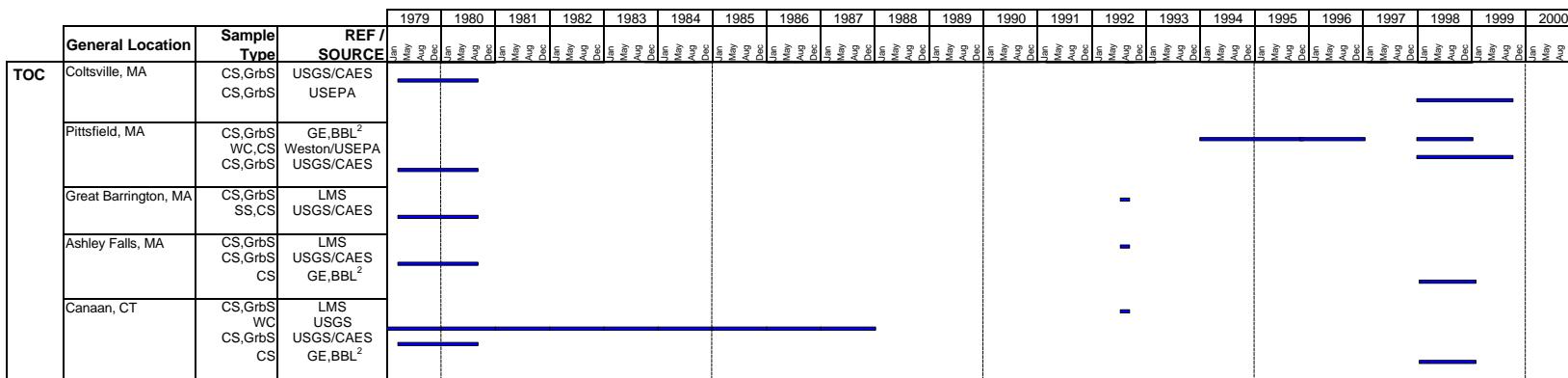
NO₃ - Nitrate concentration in water-column sample

Oil&Grease - Oil and Grease concentration

Tmp - Temperature measurement taken at daily increments
Max - Maximum

Nutr - Nutrient

Table F-6
Summary of Housatonic River TOC Data Above Canaan, CT



Explanation of Sample Types

Flow - Discharge measurement

St-30min - Stage taken at 30 minute increments

T-30min - Temperature taken at 30 minute increments

Comp. - Composite sample of biota

Indiv. - Individual sample of biota

F - Fillet sample of biota

WB - Whole Body sample of biota

TSS - Total Suspended Solids concentration

PSD - Particle Size Distribution of sediment sample

BD - Bulk Density (net weight) of sediment samples

CS - Core Sediment sample

SS - Surficial Sediment sample

GSvSC - Grain Size vs PCB Concentration

BOD₅ - Biological Oxygen Demand 5 day

WC - Water Column sample

Hazardous - Various Hazardous Constituents other than PCBs

DO - Dissolved Oxygen concentration

GrbS - Grab Sample

T&UNH₃ - Total and Unionized Ammonia concentrations

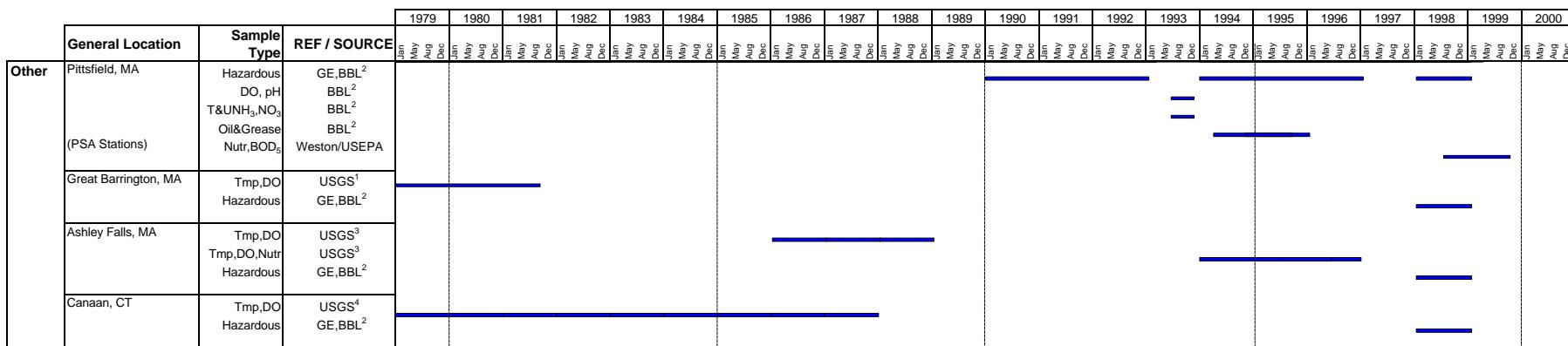
NO₃ - Nitrate concentration in water-column sample

Oil&Grease - Oil and Grease concentration

Tmp - Temperature measurement taken at daily increments

Nutr - Nutrients

Table F-7
Summary of Housatonic River Other Data Above Canaan, CT



Explanation of Sample Types

Flow - Discharge measurement

St-30min - Stage taken at 30 minute increments

T-30min - Temperature taken at 30 minute increments

Comp. - Composite sample of biota

Indiv. - Individual sample of biota

F - Fillet sample of biota

WB - Whole Body sample of biota

TSS - Total Suspended Solids concentration

PSD - Particle Size Distribution of sediment sample

BD - Bulk Density (net weight) of sediment samples

CS - Core Sediment sample

SS - Surficial Sediment sample

GSvS - Grain Size vs PCB Concentration

BOD₅ - Biological Oxygen Demand 5 day

WC - Water Column sample

Hazardous - Various Hazardous Constituents other than PCBs

DO - Dissolved Oxygen concentration

GrB - Grab Sample

T&UNH₃ - Total and Unionized Ammonia concentrations

NO₃ - Nitrate concentration in water-column sample

Oil&Grease - Oil and Grease concentration

Tmp - Temperature measurement taken at daily increments

Nutr - Nutrients

Table F-8
Summary of Housatonic Meteorological Data

	General Location	Sample Type	REF / SOURCE	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Air Temp	PITTSFIELD GE FACILITY	15-minute	GE	Jan May Aug Dec																					
	PITTSFIELD GE FACILITY	Hourly	GE																						
	HARTFORD	Hourly	NRCC																						
	ALBANY	Hourly	NRCC																						
	KNIGHTVILLE	Hourly	BASINS																						
	WEST OTIS	Daily	NRCC																						
	BERLIN 5 S	Daily	NRCC																						
	PLAINFIELD	Daily	NRCC																						
	BECKET	Daily	Earthinfo																						
	LANESBORO	Daily	Earthinfo																						
	STOCKBRIDGE	Daily	Earthinfo																						
	BORDEN BROOK RSVR	Daily	Earthinfo																						
	CHESTER2	Daily	Earthinfo																						
	CUMMINGTON HILL	Daily	Earthinfo																						
	GREAT BARRINGTON AP	Daily	Earthinfo																						
	NORTH ADAMS	Daily	Earthinfo																						
	WORTHINGTON	Daily	Earthinfo																						
	COPAKE	Daily	Earthinfo																						

Note: Colored gages intend to be used for watershed simulation

Reference/Source List for Timeline Data Tables (REF/SOURCE)

USGS¹ B U.S. Geological Survey

Surface-water station on the Housatonic River near Great Barrington, Mass. (01197500).

USGS² B U.S. Geological Survey

Surface-water station on the Housatonic River at Coltsville, Mass. (01197000).

QEA B Quantitative Environmental Analysis

Quantitative Environmental Analysis. 1998. Technical Memorandum - Spring 1997 High Flow Monitoring & Summer 1997 Bathymetric Sediment Bed Mapping Survey. Prepared to present data collected by BB&L and HydroQual.

Stewart B Stewart Laboratories, Inc

Stewart B Stewart Laboratories, Inc. 1982. Housatonic River Study 1980 and 1982 Investigations. Prepared for General Electric Company.

ANS B Academy of Natural Sciences

General Electric Company 1999. Preliminary Draft of Biota Database Summary. Prepared for discussion purposes only.

BBL¹ - Blasland, Bouck and Lee

General Electric Company 1999. Preliminary Draft of Biota Database Summary. Prepared for discussion purposes only.

USEPA B U.S. Environmental Protection Agency.

General Electric Company 1999. Preliminary Draft of 1998 Biota Database Summary. Prepared for discussion purposes only.

GE B General Electric Company

General Electric Company 1999. Preliminary Draft of 1998 Biota Database Summary. Prepared for discussion purposes only.

LMS - Lawler, Matusky and Skelly Engineers

General Electric Company. 1994. Housatonic River Connecticut Cooperative Agreement B Task IV.B: PCB Fate and Transport Model: Additional Monitoring and Model Verification. Prepared by Lawler, Matusky and Skelly Engineers.

BBL² - Blasland, Bouck and Lee

General Electric Company. 1996. Supplemental Phase II/RCRA Facility Investigation Report for Housatonic River and Silver Lake. Vol. II.: with Figures and Tables. Prepared by Blasland, Bouck and Lee.

Weston B Roy F. Weston, Inc.

Roy F. Weston, Inc. 1999. Microsoft Access Database B Data Mart. Preliminary Summary of available data.

USGS/CAES B CAES, CDEP, and USGS

Frink, C. R., K. P. Kulp, C. G. Fredette. 1981. PCBs in Housatonic River Sediments: Determination, Distribution and Transport. Draft. Prepared by CAES, CDEP, and USGS.

USGS/CTDEP B USGS and CT Department of Environmental Protection

Kulp, K.P. 1991. Concentration and Transport of Polychlorinated Biphenyls in the Housatonic River Between Great Barrington, Massachusetts, and Kent, Connecticut, 1984-1988, 1991. Prepared by USGS and CT Department of Environmental Protection.

USGS³ B U.S. Geological Survey

Surface-water station on the Housatonic near Ashley Falls, Mass. (001198125).

USGS⁴ B U.S. Geological Survey

Surface-water station on the Housatonic River near Canaan, Conn. (01198550).

USGS – U.S. Geological Survey

General Electric Company 1999. Preliminary Draft of 1998 Sediment Database Summary. Prepared for discussion purposes only.

CAES B Connecticut Agricultural Experiment Station

General Electric Company 1999. Preliminary Draft of 1998 Sediment Database Summary. Prepared for discussion purposes only.